

8-145

1-14

1983

WESTERN ANALYTICAL LABORATORIES, INC.

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

CUSTOMER CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD Santa Ana Region

WAL NO. 3060486-496

DATE RECEIVED 6-7-83

ATTENTION James W. Anderson

DATE OF REPORT 6-13-83

SAMPLE IDENTIFICATION: Water Samples for Total And Fecal Coliform

Collected by K. Saremi and J. Schneider

TANK NO. _____ GALLONS _____ SAMPLED 6-7

ANALYSIS	STANDARD	RESULTS	
L #	LOCATION	TIME	COLIFORM (MPN/100m Fecal Total)
60			
6	#1 Santiago Creek at Santiago Oak Park	10:15	49 170
7	#2 Santiago Cr. before Confluence w/Silverado Cr.	10:40	26 350
8	#3 Silverado Cr., Intersection Ladd Cyn & Silverado	11:10	46 140
9	#4 Silverado Cr. at Ladd Cyn. above homes	11:15	130 540
0	#5 Santiago Dr., Modjeska Cyn in Tucker Wildlife Sanctuary	11:50	46 94
1	#6 Santiago Cr. below homes on Santiago Cyn. Rd.	12:00	220 920
2X	#7 San Diego Cr., Corner of Muirlands & Alton	13:45	>2400 >2400
3X	#9 San Diego Cr at Culver Blvd.	14:45	1600 >2400
4X	#10 San Diego Cr. before confluence to Peters Cyn Wash ^(San Joaquin channel)	15:05	920 >2400
5X	#11 Peters Cyn Wash above confluence to San Diego Cr. ^(San Joaquin channel)	15:15	>2400 >2400
6X	#12 San Diego Cr. between Jamboree & Mac Arthur	15:45	1600 >2400

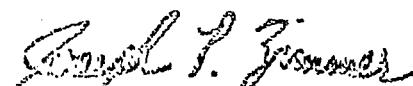
RESULTS PHONED

YES NO



TO WHOM _____

DATE _____


Cheryl J. Zissman

Laboratory Director

San Diego Creek

WESTERN ANALYTICAL LABORATORIES, INC.

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

STATE APPROVED WATER LABORATORY

WAL NO. 3060486

DATE RECEIVED 6-8-83

DATE OF REPORT 6-30-83

CUSTOMER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD Santa Ana Region

ATTENTION James W. Anderson

ADDRESS 6809 Indiana Ave

Riverside, CA 92506

AMPLE IDENTIFICATION SURFACE WATER - Grab Sample #1

AMPLING POINT Santiago Creek at Santiago Oaks Park

K. Saremi

AMPLED BY _____ DATES & HOURS SAMPLED 6-7-83; 10:15

PARAMETER	VALUE	PARAMETER	VALUE
luminum.....		Nickel.....	
nimonia (N).....	0.12 mg/l	Nitrate (N).....	0.08 mg/l
ntimony.....		Oil & Grease.....	
rsenic.....		pH.....	7.94
O D.....		Phenols.....	
arium.....		Phosphate - Ortho.....	4.76 mg/l
eryllium.....		Phosphate, Total.....	
ismuth.....		Potassium	4.14 mg/l
oron.....	0.15 mg/l	Selenium.....	
OD.....		Settleable Solids.....	
admium.....		Silver.....	
alcium.....	115 mg/l	Sodium	63.0 mg/l
chloride.....	43.8 mg/l	Specific Conductance.....	1120 micromhos/cm
chlorinated Hydrocarbons- C ₁ - C ₆		Sulfate.....	288 mg/l
chromium (Hexavalent).....		Sulfide.....	
chromium (Total).....		Surfactants (MBAS).....	
cobalt.....		Suspended Solids	
copper.....		Temperature.....	
yanide.....		Tin	
Dissolved Oxygen.....		Titanium	
Flow (total).....		Total Alkalinity	221 mg/l
Flow (peak)		Bicarbonate Alkalinity.....	221 mg/l
Fluoride.....		Carbonate Alkalinity	0 mg/l
ron.....		Total Dissolved Solids -	
ead.....	<0.02 mg/l	(Filterable Residue).....	700 mg/l
Magnesium		Total Hardness.....	442 mg/l
Manganese.....		Turbidity	
Mercury.....		Zinc.....	
Hydroxide Alkalinity	0 mg/l	Silica	7 mg/l
		Carbon Dioxide	4.6 mg/l



Joseph J. Zimmer

Laboratory Director

WESTERN ANALYTICAL LABORATORIES, INC.

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

3060487

WAL NO. 6-7-83

STATE APPROVED WATER LABORATORY

DATE RECEIVED 6-7-83

DATE OF REPORT 6-30-83

CUSTOMER CALIFORNIA REGIONAL WATER QUALITY ADDRESS 6809 Indiana Ave
CONTROL BOARD Santa Ana RegionATTENTION James W. Anderson
Riverside, CA 92506

SAMPLE IDENTIFICATION Surface Water - Grab Sample #2

AMPLING POINT Santiago Creek before confluence w/silverado creek

AMPLED BY K. Saremi

ATES & HOURS SAMPLED 6-7-83; 10:40

PARAMETER	VALUE	PARAMETER	VALUE
uminum.....	mg/l	Nickel.....	mg/l
nmonia (N).....	0.06 mg/l	Nitrate (N).....	0.14 mg/l
ntimony.....	mg/l	Oil & Grease.....	mg/l
senic.....	mg/l	pH	8.30
O D	mg/l	Phenols.....	mg/l
arium.....	mg/l	Phosphate - Ortho	6.26
eryllium.....	mg/l	Phosphate, Total.....	mg/l
smuth.....	mg/l	Potassium	1.14
oron.....	0.07 mg/l	Selenium.....	mg/l
O D	mg/l	Settleable Solids.....	ml/
admium	mg/l	Silver.....	mg/
alcium.....	77.2 mg/l	Sodium	26.3
hloride.....	17.3 mg/l	Specific Conductance.....	687 micromhos/cm
hlorinated Hydrocarbons- C ₁ - C ₆	mg/l	Sulfate	160
hromium (Hexavalent).....	mg/l	Sulfide	mg/
hromium (Total).....	mg/l	Surfactants (MBAS)	mg/
obalt.....	mg/l	Suspended Solids	mg/
opper.....	mg/l	Temperature	°F
yanide.....	mg/l	Tin	mg/
solved Oxygen.....	mg/l	Titanium	mg/
low (total).....	gals/day	Total Alkalinity	168
low (peak)	gals/min	Bicarbonate Alkalinity	168
luoride.....	mg/l	Carbonate Alkalinity	0
on	<0.02 mg/l	Total Dissolved Solids -	
ead.....	mg/l	(Filterable Residue).....	447
fagnesium.....	23.5 mg/l	Total Hardness.....	290
anganese.....	mg/l	Turbidity	Unit:
lerycury.....	mg/l	Zinc.....	mg/
Hydroxide Alkalinity	0 mg/l	Silica	12 mg/l
		Carbon Dioxide	0 mg/l

SAWPA DES



001006042

Joseph T. Zimmer

Laboratory Director

WESTERN ANALYTICAL LABORATORIES, INC.

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

WAL NO. 3060491

STATE APPROVED WATER LABORATORY

DATE RECEIVED 6-7-83

DATE OF REPORT 6-30-83

USTOMER CALIFORNIA REGIONAL WATER QUALITY ADDRESS 6809 Indiana Ave

Control Board Santa Ana Region

TTENTION James W. Anderson

Riverside, CA 92506

AMPLE IDENTIFICATION

Surface Water - Grab Sample #6

AMPLING POINT Santiago Creek below homes on Santiago Canyon Road

AMPLED BY K. Saremi

ATES & HOURS SAMPLED 6-7-83; 12:00

PARAMETER	VALUE	PARAMETER	VALUE
luminum.....		Nickel.....	
mmonia (N).....	0.03 mg/l	Nitrate (N).....	0.07 mg/l
ntimony.....	mg/l	Oil & Grease.....	mg/l
rsenic.....	mg/l	pH	8.33
O D	mg/l	Phenols.....	7.04
arium.....	mg/l	Phosphate - Ortho	mg/l
eryllium.....	mg/l	Phosphate, Total.....	0.94
ismuth.....	mg/l	Potassium	mg/l
oron.....	0.06 mg/l	Selenium.....	mg/l
:OD	mg/l	Settleable Solids.....	ml/l
admium	mg/l	Silver.....	mg/l
alcium.....	63.3 mg/l	Sodium	22.0 mg/l
hloride.....	12.0 mg/l	Specific Conductance.....	577 micromhos/cm
hlorinated Hydrocarbons- C ₁ - C ₆	mg/l	Sulfate.....	97.6 mg/l
hromium (Hexavalent).....	mg/l	Sulfide	mg/l
hromium (Total).....	mg/l	Surfactants (MBAS).....	mg/l
obalt.....	mg/l	Suspended Solids	mg/l
opper.....	mg/l	Temperature	°
Cyanide.....	mg/l	Tin	mg
Dissolved Oxygen.....	mg/l	Titanium	mg
Flow (total).....	gals/day	Total Alkalinity	170 mg
Flow (peak)	gals/min	Bicarbonate Alkalinity.....	165 mg
Fluoride.....	mg/l	Carbonate Alkalinity	5 mg
ron	<0.02 mg/l	Total Dissolved Solids -	357 mg
ead.....	mg/l	(Filterable Residue).....	243 mg
Magnesium	20.6 mg/l	Total Hardness.....	Unil
Manganese.....	mg/l	Turbidity	mg
Mercury.....	mg/l	Zinc.....	
Hydroxide Alkalinity	0 mg/l	Silica	13 mg/l
		Carbon Dioxide	0 mg/l



Carol F. Zimmer

Laboratory Director

WESTERN ANALYTICAL LABORATORIES, INC.

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

WAL NO. 3060490

STATE APPROVED WATER LABORATORY

DATE RECEIVED 6-7-83

DATE OF REPORT 6-30-83

JSTOMER CALIFORNIA REGIONAL WATER QUALITY ADDRESS 6809 Indiana Ave
CONTROL BOARD Santa Ana Region

ENTION James W. Anderson Riverside, CA 92506

AMPLE IDENTIFICATION Surface Water - Grab sample #5

AMPLING POINT Santiago Creek Modjeska Canyon in Ticker wildlife sanctuary

AMPLED BY K. Saremi

ATES & HOURS SAMPLED 6-7-83; 11:50

PARAMETER	VALUE	PARAMETER	VALUE
Minum		Nickel	
monia (N)	0.04 mg/l	Nitrate (N)	0.21 mg/l
timony		Oil & Grease	
enic		pH	8.43
OD		Phenols	
trium		Phosphate - Ortho	7.26
eryllium		Phosphate, Total	
smuth		Potassium	0.89
oron	0.13 mg/l	Selenium	
OD		Settleable Solids	
idium		Silver	
alcium	58.4 mg/l	Sodium	19.3
loride	10.5 mg/l	Specific Conductance	461
chlorinated Hydrocarbons- C ₁ - C ₆		Sulfate	71.4
romium (Hexavalent)		Sulfide	
romium (Total)		Surfactants (MBAS)	
obalt		Suspended Solids	
opper		Temperature	
yanide		Tin	
solved Oxygen		Titanium	
low (total)		Total Alkalinity	176
low (peak)		Bicarbonate Alkalinity	163
luoride	<0.02 mg/l	Carbonate Alkalinity	13
on		Total Dissolved Solids	
ead		(Filterable Residue)	317
lagnesium	20.7 mg/l	Total Hardness	231
langanese		Turbidity	
ercury		Zinc	
Hydroxide Alkalinity	0 mg/l	Silica	16 mg/l
		Carbon Dioxide	0 mg/l

SAWPA DES



001006044

Laboratory Director

No. + one.

Picture no. 3

Santiago Cr. at Santiago Oaks
after LK, Irvine Regional Park

overcast

Time: 10:15

Date: 6/7/83

Water Temp: 20°C

Flow:

Air Temp: 68°F

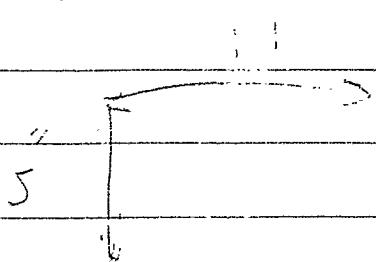
Very slow

water app'.

clear w/ 1:

an + 15

5 ft. off



NO + 2 - TWO

Pictur No 34

santiago ex before sample
by silverado ex.

At the bridge ex sample up
+ ft

60° X

JL⁴

Time 10:40

Date: 6/1/33

water temp: +96

Air Temp: 65°

water pH:

7.1 ± 2.1

pH 7.0 ±

± 0.2

NO. 5

Five

Picture # 5

Santiago or ~~andjcska~~ ~~sp.~~
~~island~~ in ~~Turkei~~ ~~wildlife~~
Sanctuary

Time: 11:50

Date: 6/7/33

Partial ~~overcast~~
water temp., 18°
air temp. 17°
wind app.

cloudy / w.

Alyzean
the site?
bottom.

No. 6 Six *purple w/*

Santiago on bottom
horizon a Santiago capping
under the ~~bedrock~~

Partial outcrop

Time: 12:00

Date: 6/7

water temp: 18° C

air Temp: 70°

water depth:

clear w/ lots

of algae on the

side and

bottom

Santiago Cr. Rd

1
2.

~~Canyon~~

st. Loma

Picture no. 1 Taken on the Bridge

on Loma st facing west

Floody day 10:30 AM.

(1)

Santiago oaks Park.

~~roads~~ ave off Santiago Cr. Rd.

Windex Dr. to the entrance
of the park.

(2) ; (3)

CHAPMAN (pass)

Lk - known (pass)

④

Santana Cr. from the Bridge

300' before Silverado Cr.

? Black star Cr.

Front
Point
5

5.
5.

⑤

modjeska cyn. rd.

to Tucker wildlife
sanctuary

inside the park off
the bridge

2 miles off Sandys Rd.

~~Hixes left to bond rt.~~

~~prospect rt.~~

~~Villa Park~~

(6) - (7) Reservoir on Both sides
of villa park.

Picture taken off the Bridge.

(8)

Chapman ← SS FWY.

concrete pipe.

Picture is off of the Bridge

(9)

fwy 22 west of Glassell

in the city park.

no flow.

Santago Creek
8-14-6

1984

WESTERN ANALYTICAL LABORATORIES, INC. FEB 2 1984

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

CUSTOMER CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARDWAL NO. 4010822-829DATE RECEIVED 1-19-84ATTENTION J. SchneiderDATE OF REPORT 1-31-84SAMPLE IDENTIFICATION: Water Samples for Fecal & Total ColiformSampled by J. Schneider

TANK NO. _____ GALLONS _____ SAMPLED _____

ANALYSIS		STANDARD		RESULTS	
WAL #	LOCATION	Date	Time	COLIFORM (MPN/100 ml)	
				Fecal	Total
4010822	Santiago cr at Santiago cny rd bridge south of Modjeska Cyn Rd	1-19	1250	13	170
4010823	San Diego Cr. at corner of Muirlands and Alton	1-19	1325	240	1600
4010824	San Diego Cr at Laguna Rd	1-19	1350	140	>2400
4010825	San Diego Cr. between Jamboree and Mac Arthur	1-19	1420	79	1600
4010826	Peters Cyn Wash upstream of San Diego Cr confluence <small>San Joaquin Channel</small>	1-19	1445	130	>2400
4010827	San Diego Cr upstream of confluence with Peters Cyn Wash	1-19	1500	180	>2400
4010828	San Cyn Wash at University Dr.	1-19	1520	240	>2400
4010829	San Diego Cr at Culver Dr	1-19	1540	1600	1600

RESULTS PHONED

 YES NO

TO WHOM _____

DATE _____

Laboratory Director

WESTERN ANALYTICAL LABORATORIES, INC.

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

WAL NO. 4010836

STATE APPROVED WATER LABORATORY

DATE RECEIVED 1-19-84

DATE OF REPORT 2-23-84

CUSTOMER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD Santa Ana Region
ATTENTION James W. Anderson ADDRESS 6809 Indiana Ave
Riverside, CA 92506

AMPLE IDENTIFICATION Surface Water

AMPLING POINT #1 Santiago Creek at Santiago Oaks Regional Park T 45, R 9W, not sectioned

AMPLED BY J. Schneider

DATES & HOURS SAMPLED 1-19-84 0920 hrs

PARAMETER	VALUE	PARAMETER	VALUE
Aluminum.....		Nickel.....	
Nitrogen (N).....	0.08 mg/l	Nitrate (N).....	0.28 mg/l
Antimony.....		Oil & Grease.....	
Selenium.....		pH.....	7.80
OD.....		Phenols.....	
Arium.....		Phosphate - Ortho.....	0.05 mg/l
Seryllium.....		Phosphate, Total.....	6.02 mg/l
ismuth.....		Potassium	
.....	0.22 mg/l	Selenium.....	
admium.....		Settleable Solids.....	
alcium.....	105 mg/l	Silver.....	
hloride.....	75.6 mg/l	Sodium	108 mg/l
chlorinated Hydrocarbons- C ₁ - C ₆		Specific Conductance.....	1480 micromhos/cm
hromium (Hexavalent).....		Sulfate.....	365 mg/l
hromium (Total).....		Sulfide.....	0.02 mg/l
obalt.....		Surfactants (MBAS).....	
opper.....		Suspended Solids	
yanide.....		Temperature.....	°F
issolved Oxygen.....		Tin	
low (total).....		Titanium	
low (peak).....		Total Alkalinity.....	229 mg/l
luoride.....		Bicarbonate Alkalinity.....	229 mg/l
on.....	<0.02 mg/l	Carbonate Alkalinity	0 mg/l
ead.....		Total Dissolved Solids -	
Magnesium.....	47.9 mg/l	(Filterable Residue).....	890 mg/l
Manganese.....		Total Hardness.....	460 mg/l
Mercury.....		Turbidity	Units
droxide alkalinity	0 mg/l	Zinc.....	mg/l
		Carbon Dioxide	8.8 mg/l
		Silica	6 mg/l

Total coliform: 920 MPN/100 ml

Fecal coliform: 49 MPN/100 ml

Water temp: 9°C

Flow : 2 l/cfs



001006035

Joseph F. Zimmer

Laboratory Director

WESTERN ANALYTICAL LABORATORIES, INC.

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

4010837

WAL NO.

STATE APPROVED WATER LABORATORY

DATE RECEIVED

1-19-84

DATE OF REPORT

2-23-84

CUSTOMER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD Santa Ana Region
ATTENTION James W. Anderson

ADDRESS 6809 Indiana Ave
Riverside, CA 92506

SAMPLE IDENTIFICATION

Surface Water

SAMPLING POINT #2 Santiago Creek at Santiago Canyon Road Bridge, Upstream of Silverado creek confluence

SAMPLED BY J. Schneider T53, R8W, Irvine Ranch sec. 146 A

DATES & HOURS SAMPLED 1-19-84 0950 hrs

PARAMETER	VALUE	PARAMETER	VALUE
luminum.....	mg/l	Nickel.....	mg/l
mmonia-(N).....	0.07 mg/l	Nitrate-(N).....	0.36 mg/l
ntimony.....	mg/l	Oil & Grease.....	mg/l
rsenic.....	mg/l	pH.....	8.20
OD.....	mg/l	Phenols.....	mg/l
arium.....	mg/l	Phosphate - Ortho.....	0.05 mg/l
teryllium.....	mg/l	Phosphate, Total.....	mg/l
simum.....	mg/l	Potassium.....	1.45 mg/l
.....	0.09 mg/l	Selenium.....	mg/l
.....	mg/l	Settleable Solids.....	ml/l
admium.....	mg/l	Silver.....	mg/l
alcium.....	60.5 mg/l	Sodium.....	26.5 mg/l
hloride.....	18.8 mg/l	Specific Conductance.....	562 micromhos/cm
hlorinated Hydrocarbons- C ₁ - C ₆	mg/l	Sulfate.....	103 mg/l
chromium (Hexavalent).....	mg/l	Sulfide.....	mg/l
chromium (Total).....	mg/l	Surfactants (MBAS).....	mg/l
cobalt.....	mg/l	Suspended Solids.....	<0.02 mg/l
opper.....	mg/l	Temperature.....	°F
yanide.....	mg/l	Tin.....	mg/l
issolved Oxygen.....	mg/l	Titanium.....	mg/l
Flow (total).....	gals/day	Total Alkalinity.....	170 mg/l
Flow (peak).....	gals/min	Bicarbonate Alkalinity.....	170 mg/l
luoride.....	mg/l	Carbonate Alkalinity.....	0 mg/l
ron.....	<0.02 mg/l	Total Dissolved Solids -	355 mg/l
ead.....	mg/l	(Filterable Residue).....	235 mg/l
agnesium.....	20.5 mg/l	Total Hardness.....	Units
anganese.....	mg/l	Turbidity.....	mg/l
mercury.....	mg/l	Zinc.....	mg/l
droxide alkalinity	0 mg/l	Carbon Dioxide	2.0 mg/l
		Silica	17 mg/l

Total coliform: 220 MPN / 100 ml

Fecal coliform: 8 MPN / 100 ml

Water temp: 11°C

Flow: 12 cfs



001006036

All samples are analyzed by "Standard Methods for Chemical Analysis of Water and Waste".

Laboratory Director

"Methods for Chemical Analysis of Water and Waste".

WESTERN ANALYTICAL LABORATORIES, INC.

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

WAL NO. 4010843

STATE APPROVED WATER LABORATORY

DATE RECEIVED 1-19-84

DATE OF REPORT 2-23-84

CUSTOMER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD Santa Ana Region
ATTENTION James W. Anderson

ADDRESS 6809 Indiana Ave

Riverside, CA 92506

SAMPLE IDENTIFICATION Surface Water

SAMPLING POINT #8 Modjeska Canyon Creek at Tucker Wildlife Sanctuary

SAMPLED BY J. Schneider T53, R7W, sec. 28 G

DATES & HOURS SAMPLED 1-19-84 1230 hrs

PARAMETER	VALUE	PARAMETER	VALUE
Aluminum.....	mg/l	Nickel.....	mg/l
Amonia-N.....	0.04 mg/l	Nitrate (N).....	0.31 mg/l
Antimony.....	mg/l	Oil & Grease.....	mg/l
Arsenic.....	mg/l	pH.....	8.30
OD.....	mg/l	Phenols.....	mg/l
Barium.....	mg/l	Phosphate - Ortho.....	<0.05 mg/l
Beryllium.....	mg/l	Phosphate, Total.....	1.08 mg/l
Bismuth.....	mg/l	Potassium.....	mg/l
Boron.....	0.09 mg/l	Selenium.....	mg/l
Cadmium.....	mg/l	Settleable Solids.....	ml/l
Calcium.....	47.3 mg/l	Silver.....	mg/l
Chloride.....	11.0 mg/l	Sodium.....	21.6 mg/l
Chlorinated Hydrocarbons- C ₁ - C ₆	mg/l	Specific Conductance.....	423 micromhos/cm
Chromium (Hexavalent).....	mg/l	Sulfate.....	65.8 mg/l
Chromium (Total).....	mg/l	Sulfide.....	<0.02 mg/l
Cobalt.....	mg/l	Surfactants (MBAS).....	mg/l
Copper.....	mg/l	Suspended Solids.....	mg/l
Cyanide.....	mg/l	Temperature.....	°F
Dissolved Oxygen.....	mg/l	Tin.....	mg/l
Flow (total).....	gals/day	Titanium.....	mg/l
Flow (peak).....	gals/min	Total Alkalinity.....	165 mg/l
Fluoride.....	mg/l	Bicarbonate Alkalinity.....	165 mg/l
Iron.....	<0.02 mg/l	Carbonate Alkalinity.....	0 mg/l
Lead.....	mg/l	Total Dissolved Solids -	271 mg/l
Magnesium.....	18.5 mg/l	(Filterable Residue).....	194 mg/l
Manganese.....	mg/l	Total Hardness.....	Units
Mercury.....	mg/l	Turbidity.....	mg/l
Hydroxide alkalinity	0 mg/l	Zinc.....	mg/l

Carbon Dioxide <0.5 mg/l
Silica 19 mg/l

Total coliform: 49 MPN/100 ml

Fecal coliform: 2 MPN/100 ml

Water temp: 11°C

Flow: 13.7 cfs



001006037

Laboratory Director

WESTERN ANALYTICAL LABORATORIES, INC.

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

4010844

WAI NO.

- 1 - 19-84

DATE RECEIVED

2-23-84

DATE OF REPORT

[View Details](#)

SAMPLE IDENTIFICATION Surface Water

SAMPLING POINT #9 Santiago Creek at Santiago Canyon Road Bridge South of Modjeska Canyon Road

SAMPLED BY J. Schneider

T55, RTW, not sectioned

DATES & HOURS SAMPLED

1-19-84

1-19-84

PARAMETER	VALUE	PARAMETER	VALUE
Juminum (N)	0.02 mg/l	Nickel (N)	0.20 mg/l
mmonia (N)		Nitrate	
ntimony		Oil & Grease	
rsenic		pH	
O D		Phenols	
arium		Phosphate - Ortho	
eryllium		Phosphate, Total	
sismuth	0.12 mg/l	Potassium	
adium		Selenium	
alcium	54.4 mg/l	Settleable Solids	
chloride	13.7 mg/l	Silver	
chlorinated Hydrocarbons- C ₁ - C ₆		Sodium	486 mg/l
chromium (Hexavalent)		Specific Conductance	79.2 micromhos/cm
chromium (Total)		Sulfate	
cobalt		Sulfide	
copper		Surfactants (MBAS)	
yanide		Suspended Solids	
issolved Oxygen		Temperature	
flow (total)		Tin	
flow (peak)		Titanium	
luoride	<0.02 mg/l	Total Alkalinity	
ron		Bicarbonate Alkalinity	
ead		Carbonate Alkalinity	
agnesium	18.6 mg/l	Total Dissolved Solids -	
anganese		(Filterable Residue)	
Mercury		Total Hardness	
Hydroxide alkalinity	0 mg/l	Turbidity	
		Zinc	
		Carbon Dioxide	1.3 mg/l
		Silica	18 mg/l

Total coliform: 170 MPN/100 ml

Fecal coliform: 13 MPN / 100 ml

Water temp: 13 °C

Flow : 16 cfs

SAWPA DES



001006038

Jay F. Zinner

Laboratory Director

Location: Santiago Cr. at Santiago Oaks Regional Park

Date: 1-19-84 Time: 0920 hrs

Sample #: 1

Sampled by: J Schneider

Weather: overcast

Water Temp: ?? C

Air Temp: ~50.55 °F

Water Appearance: clear

Flow: ponded; slight flow (≤ 10 cm/min)
at outlet (see picture #)

T4S, R9W, not sectioned

Location: Santiago Cr. at Santiago Canyon Rd - bridge, upstream
Date: 1-19-84 Time: 0950 hrs & Silverado Cr. confluence

Sample #: 2

Sampled by: J Schneider

Weather: overcast

Water Temp: 11°C

Air Temp: ~55°F

Water Appearance: clear

Flow: W= 20' D= 35' H= 40/25 sec
↓
Aug. 22'

Flow = 12.3 cfs

T53, R 8W, Irvine Ranch sec 146 A

Location: Modjeska Cr. at Tucker Wildlife Sanctuary

Date: 1-19-84 Time: 12:30 hrs

Sample #: 8

Sampled by: J Schneider

Weather: partial clouds

Water Temp: 10°

Air Temp: ~70°F

Water Appearance: clear, some algal growth

Flow: D = 6' W = ~12' $\frac{45}{2} \text{ sec}$

$$\text{Flow} = 13.7 \text{ cfs}$$

T53, R7W, sec 28G

-ocation: Santiago Cr. at Santiago Cyn. Rd bridge south of
Modjeska Canyon Rd. intersection

Date: 1-19-84 Time: 1250

Sample #: 9

Sampled by: J Schneider

Weather: clear

Water Temp: 13°C

Air Temp: ~70°F

Water Appearance: clear; some algae

Flow: W = 15' D = .5' 60/25 sec
Flow = 16 cfs

T53, RTW, not sectioned

WESTERN ANALYTICAL LABORATORIES, INC. 2 1984

13744 MONTE VISTA AVENUE

CHINO, CALIFORNIA 91710

(714) 627-3628

CUSTOMER CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARDWAL NO. 4010812-821DATE RECEIVED 1-19-84ATTENTION J. SchneiderDATE OF REPORT 1-31-84SAMPLE IDENTIFICATION: Water Samples for Fecal & Total Coliformsampled by J. Schneider

TANK NO. _____ GALLONS _____ SAMPLED _____

WAL #	LOCATION	Date	Time	RESULTS	
				Coliform (MPN/100 ml)	
				Fecal	Total
4010814	Santiago Creek at Santiago Oaks Regional Park	1-19	0920	49	920
4010815	Santiago Cr. at Santiago Cyn Rd. bridge upstream of Silverado Cr Confluence	1-19	0950	8	220
4010816	Silverado Cr. at Black Star Cyn. Rd.	1-19	1015	11	350
4010817	Silverado Cr. just upstream of Ladd Cyn. Cr. confluence	1-19	1050	110	1600
4010818	Ladd Cyn Cr just upstream of confluence with Silverado Cr.	1-19	1050	11	140
4010819	Ladd Cyn Cr at end of Paved road	1-19	1100	49	49
4010820	Silverado cr at end of paved road	1-19	1125	<2	49
4010821	Modjeska cyn cr at Tucker Wildlife Sanctuary	1-19	1230	2	49

SAWPA DES



001006039

RESULTS PHONED YES NO

TO WHOM _____

DATE _____

Laboratory Director

8-147

1955

Santiago/Medjedka Creek

Date: 8-20-85

Tests: Total. Solids; Total. Solids
Total Nitrate
Turbidity
Nitrate / phosphates

Sample Stations

1. Santiago Creek - 100% of discharge
Particulate TSS, P.P.D., not measured.

2. Santiago Creek at Santiago River mouth
Effluent discharge from the river considered;
TSS, TDS, Total Phosphorus, Total Nitrogen

3. Medjedka Creek at Turner's Mill Sanctuary,
TSS, E.P.H., sec. 285.

4. Medjedka Creek at Santiago River mouth
TSS, TDS, E.P.H.

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY
PHONE 684-1881
AREA CODE 714
LABORATORIES
115 CHICAGO AVENUE

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P. O. BOX 432
RIVERSIDE, CALIFORNIA 92502



TO Regional Water Quality Control Board
6809 Indiana Ave. Suite 200
Riverside, CA 92506

California Regional W.
QUALITY CONTROL BOARD

MAR 25 1985

Copy Sent to State 3-27-85
Lab No. 850320-B257
Invoice No. 40860

MAR 26 1985

SANTA ANA RIVER

California Regional W.
QUALITY CONTROL BOARD

Submitted Sampled
By Nancy
Date 3-20 3-20
Time 4:05
Time Started 3/21 10:00 AM

Sample Mark	Standard Plate Count	Coliform Bacteria										Tubes +	MPN/100 ml
		ml Planted	Presumptive			Confirmed			Tubes +	MPN/100 ml	Fecal		
<i>Ontario Cr. at Ontario Park</i>	10	24	+	+	+	+	+	+	24	+	+	+	+
		48							48				
		24	+	+	+	+	+	+	24	+	+	-	+
		48							48				
		24	+	+	+	+	+	+	24	—	—	—	—
	0.1	48							48	—	+	—	—
		24							24				
		48							48				
		24	+	+	+	+	+	+	24	+	—	+	—
		48							48				
<i>Silverside Cr. upstream Silverside Cr. Black Star</i>	10	24	+	+	+	+	+	+	24	+	+	+	+
		48							48				
		24	+	+	+	+	+	+	24	—	—	+	—
		48							48	—	+	+	—
		24	+	+	+	+	+	+	24	—	—	—	—
	0.1	48							48	+	—	+	—
		24							24				
		48							48				
		24	+	+	+	+	+	+	24	—	—	—	—
		48							48				
<i>Silverside Cr. Black Star n.s.d.</i>	10	24	+	+	+	+	+	+	24	+	+	—	—
		48							48				
		24	+	+	+	+	+	+	24	—	+	—	—
		48							48	+	—		
		24	+	+	+	+	+	+	24	—	—	—	—
	0.1	48							48	—	+	—	—
		24	+	+	+	+	+	+	24	—	—	—	—
		48							48				
		24							24				
		48							48				

SAWPA DES



001006026

EDWARD S. BABCOCK & SONS, INC.

CALLED

Ronald Babcock

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY
PHONE 684-1881
AREA CODE 714
LABORATORIES
3215 CHICAGO AVENUE

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P. O. BOX 432
RIVERSIDE, CALIFORNIA 92502

CALIFORNIA REGIONAL
QUALITY CONTROL BOARD



MAR 26 1985

TO MAR 25 1985
Regional Water Quality Control Board
6809 Indiana Ave. Suite 200
Riverside, CA 92506

SANTA ANA RECALL

Lab No. 850320-0259
Invoice No. 40860

Submitted Sampled

By Sherry

Date 3-20 3-20

Time 4:05

Time Started 3/21 10:00 AM

Sample Mark	Standard Plate Count	Coliform Bacteria										Tubes +	MPN/100 ml
		ml Plated	Presumptive			Confirmed			Tubes +	MPN/100 ml	Fecal		
<i>Silverado up -</i> <i>ream of added</i> <i>exp. no. confluent</i>		24	+	+	+	+	+	+	24	+	+	+	+
	10	48							5	900			5 30
		24	+	+	+	+	+	+	24	+	-	-	-
	1	48							5				1
		24	+	+	+	+	+	+	24	-	-	-	-
	0.1	48							3				0
		24							24				
		48											
<i>Ladd Cyn Cr.</i> <i>st. of Silverado</i> <i>2. Transient up</i>		24	+	+	+	+	+	+	24	+	+	+	+
	10	48							5	220			5 23
		24	+	+	+	+	+	+	24	-	-	-	-
	1	48							4				0
		24	+	+	+	+	+	+	24	-	-	-	-
	0.1	48							2				0
		24							24				
		48											
<i>Ladd Cyn Cr.</i> <i>st. of paved</i> <i>up</i>		24	+	+	+	+	+	+	24	+	-	+	+
	10	48							5	90			3 11
		24	+	+	+	+	+	+	24	-	-	-	-
	1	48							2				0
		24	+	+	+	+	+	+	24	-	+	-	-
	0.1	48							2				1
		24							24				
		48											

SAWPA DES



001006027

EDWARD S. BABCOCK & SONS, INC.

CALLED

Sherman Babcock

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVENUE

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC., SANTA CLARA REGIONAL WATER BOARD

P. O. BOX 432
RIVERSIDE, CALIFORNIA 92502

MAR 26 1985



TO Regional Water Quality Control Board
6809 Indiana Ave. Suite 200
Riverside, CA 92506

Lab No. 850320-B260
Invoice No. 40860

MAR 25 1985

Submitted Sampled
By Nancy
Date 3-20 3-20
Time 4:05
Time Started 3/21 10:15 A.M.

Sample Mark	Standard Plate Count	Coliform Bacteria										Tubes +	MPN/100
		ml Planted	Presumptive			Confirmed			Tubes +	MPN/100ml	Fecal		
Silverado Cr. estream control		10	24 + + + + +	24 - - - + +							24 - - - + -		
		1	48 + + + + +	48 + + +					5	300			1 2
			24 + + + + +	24 - - + - -							24 - - - - -		
		0.1	48 + + + + +	48 + + + + +					5				0
			24 + + + + +	24 - - - - -							24 - - - - -		
			48 + + + + +	48 + + + + +							24 + + + + +		0
Silverado Crat. 2.5 mi. of head end		10	24 + + + + +	24 + + + + +					5	1600	24 + + + + +		
		1	48 + + + + +	48 + + + + +					5		24 + + + + +		5
			24 + + + + +	24 + + + + +							24 + + + + +		
		0.1	48 + + + + +	48 + + + + +					5				5
			24 + + + + +	24 + + + + +							24 + + + + +		
			48 + + + + +	48 + + + + +							24 + + + + +		
Modjeska Cr. tucker wildlife area		10	24 + + + + +	24 + + + + +					5	1600	24 + + + + +		
		1	48 + + + + +	48 + + + + +					5		24 + + + + +		5
			24 + + + + +	24 + + + + +							24 + + + + +		
		0.1	48 + + + + +	48 + + + + +					4				1
			24 + + + + +	24 + + + + +							24 + + + + +		
			48 + + + + +	48 + + + + +							24 + + + + +		

SAWPA DES



001006028

EDWARD S. BABCOCK & SONS, INC.

Nancy Babcock

CALLED

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
215 CHICAGO AVENUE

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P. O. BOX 432
RIVERSIDE, CALIFORNIA 92502



MAR 25 1985

TO Regional Water Quality Control Board
6809 Indiana Ave. Suite 200
Riverside, CA 92506

SANTA ANA REG.

Lab No. 850320-B261

Invoice No. 40860

Submitted Sampled

By Nancy

Date 3-20 3-20

Time 9:05

Time Started 3/21 10:15 AM

Sample Mark	Standard Plate Count	Coliform Bacteria										Tubes +	MPN/100 ml	
		ml Planted	Presumptive			Confirmed			Tubes +	MPN/100 ml	Fecal			
Modjeska Cr. Sampling Station		10	24	+	++	++	++	+	24	+	++	++	5	500
		10	48						48					
		1	24	+	++	++	++	-	24	-	-	-		
		1	48					+	48	+	++		5	
		0.1	24	+	++	++	+	-	24	-	-	-		
		0.1	48					-	48	-	+-	-	2	
			24						24					
			48						48					
			24						24					
			48						48					
		10	24						24					
		10	48						48					
		1	24						24					
		1	48						48					
		0.1	24						24					
		0.1	48						48					
			24						24					
			48						48					
			24						24					
			48						48					
		10	24						24					
		10	48						48					
		1	24						24					
		1	48						48					
		0.1	24						24					
		0.1	48						48					
			24						24					
			48						48					

SAWPA DES
001006029

EDWARD S. BABCOCK & SONS, INC.

Sherman Babcock

CALLED

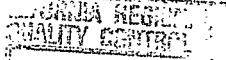
AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.
P.O. BOX 432
RIVERSIDE, CALIFORNIA 92502



APR 9 1985

SANTA ANA 7

4/8/85

To: Regional Water Quality Control Board #8
6809 Indiana Avenue, Suite 200
Riverside, CA 92506

Lab No. 850320-130
Invoice No. 40863

Submitted Sampled

#1
Sample Marked: Santiago Cr.
Santiago Oak Reg. Park

By Nancy
Date 3/20 3/20
Time 4:05

<u>PARAMETER</u>	<u>RESULT</u>
Total Hardness as CaCO ₃	590 mg/L
Sodium (Na)	158 mg/L
Sulfate (SO ₄)	365 mg/L
Chloride (Cl)	148 mg/L
Nitrate (NO ₃)	<1 mg/L
Specific Conductance	1610 umho/cm
Total Filterable Residue	1075 mg/L
Total Phosphorus	0.1 mg/L
Phosphate (PO ₄)	0.1 mg/L
MBAS	<0.1 mg/L

Fecal Coli = 80 MPN/100mL
Total Coli = 300 MPN/100mL
Water Temp. = 13°C
Flow = < 1.0 cfs

SAWPA DES

001006030

EDWARD S. BABCOCK & SONS, INC.

Edward Babcock

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P.O. BOX 432
RIVERSIDE, CALIFORNIA 92502



CWA APPROVED

4/8/85

To: Regional Water Quality Control Board #8
6809 Indiana Avenue, Suite 200
Riverside, CA 92506

Lab No. 850320-131
Invoice No. 40863

Submitted Sampled

#2

Sample Marked: Santiago Cr. Upstream of
Silverado Cr. Confluence

By Nancy
Date 3/20 3/20
Time 4:05

PARAMETER RESULT

Total Hardness as CaCO ₃	290 mg/L
Sodium (Na)	29 mg/L
Sulfate (SO ₄)	125 mg/L
Chloride (Cl)	20 mg/L
Nitrate (NO ₃)	6 mg/L
Specific Conductance	630 umho/cm
Total Filterable Residue	395 mg/L
Total Phosphorus	<0.1 mg/L
Phosphate (PO ₄)	<0.1 mg/L
MBAS	0.1 mg/L

Total Coli = 220 MPN / 100 ml

Fecal Coli = .11 MPN / 100 ml

Water Temperature = 21°C

Flow = 4.1 cfs

SAWPA DES



001006031

EDWARD S. BABCOCK & SONS, INC.

Edward S. Babcock

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P.O. BOX 432
RIVERSIDE, CALIFORNIA 92502



SANIA AVE

4/8/85

To: Regional Water Quality Control Board #8
6809 Indiana Avenue, Suite 200
Riverside, CA 92506

Lab No. 850320-138
Invoice No. 40863

H9 Modjeska
Sample Marked: Modjeska Cr. Wildlife
Sanctuary

	<u>Submitted</u>	<u>Sampled</u>
By Nancy		
Date 3/20		3/20
Time 4:05		

<u>PARAMETER</u>	<u>RESULT</u>
Total Hardness as CaCO ₃	285 mg/L
Sodium (Na)	21 mg/L
Sulfate (SO ₄)	79 mg/L
Chloride (Cl)	9 mg/L
Nitrate (NO ₃)	<1 mg/L
Specific Conductance	560 umho/cm
Total Filterable Residue	350 mg/L
Total Phosphorus	<0.1 mg/L
Phosphate (PO ₄)	<0.1 mg/L
MBAS	<0.1 mg/L

Total Col. = 1650 MPN/100 ml.
Fecal Col. = 300 MPN/100 ml.
Water Temp. = 16°C
Flow = 2.8 cfs

SAWPA DES

001006032

EDWARD S. BABCOCK & SONS, INC.

Sherman Babcock

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P.O. BOX 432
RIVERSIDE, CALIFORNIA 92502

SANTA ANA REGION

APR 1 1985



4/8/85

To: Regional Water Quality Control Board #8
6809 Indiana Avenue, Suite 200
Riverside, CA 92506

Lab No. 850320-139
Invoice No. 40863

#10

Sample Marked: Madjeska
Madjeska Cr. at
Gaging Stc.

<u>Submitted</u>	<u>Sampled</u>
By Nancy	
Date 3/20	3/20
Time 4:05	

<u>PARAMETER</u>	<u>RESULT</u>
Total Hardness as CaCO ₃	295 mg/L
Sodium (Na)	25 mg/L
Sulfate (SO ₄)	96 mg/L
Chloride (Cl)	11 mg/L
Nitrate (NO ₃)	<1 mg/L
Specific Conductance	610 umho/cm
Total Filterable Residue	380 mg/L
Total Phosphorus	<0.1 mg/L
Phosphate (PO ₄)	<0.1 mg/L
MBAS	<0.1 mg/L

Total Col. = 500 MPN / 100 ml

Fecal Col. = 500 MPN / 100 ml

Water Temp. = 18 °C

Flow = 5.6 cfs

Flow =

SAWPA DES



001006033

EDWARD S. BABCOCK & SONS, INC.

Edward Babcock

Date: 3-20-85 Time: 1046 hours
Location: Santiago Creek at Santiago Oaks Regional Park

Log Location: THS, R9W; not sectioned

Sample #: 1

Sampled by: SES/NAO

Weather: Warm & Clear

Air Temp: ~72° F

Water Temp: 13° C

Water Appearance: Clear w/ silty + sandy bottom. Rapidly developing marsh

Flow: <1.0 cfs

Date: 3-20-85

Time: 1113 hours

Location: Santiago Creek at Santiago Canyon Road bridge, upstream of Silverado Creek confluence.

Legal Location: T5S, R8W, Irvine Ranch sec. 14 1/4

Sample #: 2

Sampled by: SES/NAO

Weather: Clear & Warm

Air Temp: ~75°F

Water Temp: 21°C

Water Appearance: clear... pebble bottom, much algal growth -
Flow: 4.09 cfs algal mats at stream edge

$$d = 0.3 \quad w = 15' \quad v = 10'/\text{sec.}$$

Date : 3-20-85

Time : 1405 hours

Location : Modjeska Creek @ Tucker Wildlife Sanctuary
(1.3 miles from site 8)

Legal location : TSS, R7W, sec. 28 G

Sample # : 9

Sampled by : SES / NAO

Weather : Warm & Clear

Air Temp : ~ 75°F

Water Temp : 16°C

Water Appearance : Clear w/ no algal growth. Pebble &

Flow : cobble bottom

2.8 cfs

w = 6.5' d = 0.3 v = 10'/7sec.

Date: 3-20-85 Time: 1438 hours

Location: Modjeska Creek at bagging station (USGS)

Legal location: T5S, R7W, sec. 29E

Sample #: 10

Sampled by: SES/NAD

Weather: Warm & Clear

Air Temp: ~75°F

Water Temp: 18°C

Water appearance: clear; some algal growth; pebble/cobble bottom.

Flow: 5.6 cfs

$$d=0.6' \quad w=11' \quad v=17'/20 \text{ sec.}$$